

Middlesex University Research Repository

An open access repository of

Middlesex University research

<http://eprints.mdx.ac.uk>

Haddock-Millar, Julie ORCID logoORCID: <https://orcid.org/0000-0002-2773-7550> (2017)
Critical issues in mentoring research. In: The SAGE Handbook of Mentoring. Clutterbuck, David, Kochan, Frances K., Lunsford, Laura Gail, Dominguez, Nora and Haddock-Millar, Julie ORCID logoORCID: <https://orcid.org/0000-0002-2773-7550>, eds. SAGE Publications, pp. 52-66. ISBN 9781412962537. [Book Section] (doi:10.4135/9781526402011.n4)

Final accepted version (with author's formatting)

This version is available at: <https://eprints.mdx.ac.uk/22946/>

Copyright:

Middlesex University Research Repository makes the University's research available electronically.

Copyright and moral rights to this work are retained by the author and/or other copyright owners unless otherwise stated. The work is supplied on the understanding that any use for commercial gain is strictly forbidden. A copy may be downloaded for personal, non-commercial, research or study without prior permission and without charge.

Works, including theses and research projects, may not be reproduced in any format or medium, or extensive quotations taken from them, or their content changed in any way, without first obtaining permission in writing from the copyright holder(s). They may not be sold or exploited commercially in any format or medium without the prior written permission of the copyright holder(s).

Full bibliographic details must be given when referring to, or quoting from full items including the author's name, the title of the work, publication details where relevant (place, publisher, date), pagination, and for theses or dissertations the awarding institution, the degree type awarded, and the date of the award.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Middlesex University via the following email address:

eprints@mdx.ac.uk

The item will be removed from the repository while any claim is being investigated.

See also repository copyright: re-use policy: <http://eprints.mdx.ac.uk/policies.html#copy>

Critical Issues in Mentoring Research

Julie Haddock-Millar, Ph.D.

Middlesex University Business School

Introduction

Research into the activity of mentoring has grown at a significant rate in the last twenty years (Allen, Eby, O'Brien & Lentz, 2008; Janssen, Vuuren & Jong, 2015) as has the range of inter-disciplinary subjects associated with mentoring, such as business, education, entrepreneurship, nursing and psychology (De Four, Pegg & Beck, 2015; Kochan, 2013; Laukhuf & Malone, 2015; Underhill, 2006).

Allen et al.'s (2008) review of organizational mentoring literature – consisting of two hundred and seven individual research studies, published in sixty different journals acknowledged the growing interest and research on the topic of mentoring. The authors attributed this to the increasing recognition that formal and informal mentoring is associated with behavioral, attitudinal and career benefits for mentees and mentors (Allen et al., 2004; Eby et al., 2008; Ghosh & Reio, 2013). Additionally, over the last ten years there have been an increasing number of evaluations of mentoring research processes and practices (Allen et al., 2008; Bozeman & Feeney, 2007; Janssen, Vuuren & Jong, 2015; Kammeyer-Mueller & Judge, 2008; Underhill, 2006). A broad range of mentoring studies are explored in this chapter within the context of identifying the critical issues involved in assuring the quality of mentoring research.

Purpose and Overview

The aim of this chapter is to provide an in-depth analysis of the critical issues related to the quality of research processes and strategies used in contemporary inter-disciplinary scholarly literature in mentoring. Further, it seeks to expand researcher and practitioner perspectives about this issues that will ultimately enhance the research about and practice of mentoring.

The chapter begins with an outline of the process used to identify critical issues in assuring quality in mentoring research. This is followed by a discussion of each of the eight

critical issues identified through this process, referring to specific studies that illustrate the degree to which quality is achieved. The final section posits the way ahead for mentoring research.

Critical Issues in Mentoring Research

It is not possible to identify, review, and then discuss in detail the hundreds of scholarly articles, dissertations and books available on the subject of mentoring. Instead, I searched for some general themes from a bounded set of resources to identify the critical issues in mentoring research. The process I adopted was:

- Reviewed all mentoring articles published within the last five years in five journals with a strong mentoring focus, including: *International Journal of Coaching and Mentoring*, *International Journal of Evidence-Based Coaching and Mentoring*; *International Journal of Mentoring in Education*; *Journal of Vocational Behavior*; and *Mentoring and Tutoring: Partnership in Learning*.
- Through the back chaining process, I identified twenty further studies which provided a critical insight into methodological limitations.
- Reviewed ten widely published textbooks on the subject of mentoring, with a view to identifying common issues related to the quality of mentoring research.
- Identified a sample of articles which illustrate a cross-section of methodological approaches and limitations.
- Selected a list of critical issues in mentoring, identified through this review process and incorporated them into this chapter.

Critical Areas in Mentoring Research

Overall, the literature appears to call for the further development and refinement of mentoring research in eight critical areas:

- Defining the mentoring concept as a theoretical basis for research;
- Identifying mentoring program aims, objectives and operational components;
- Understanding context and the connectedness between multiple factors;
- Proving cause-and-effect;
- Developing cross-cultural comparative studies;
- Engaging in the utilisation of multiple and varied research methods;
- Enhancing methodological rigour; and
- Addressing the ‘so what’ question.

The sections that follow summarize each critical issue and explain why each is important in advancing knowledge, understanding and mentoring practice through the continual improvement of the quality of mentoring research. I draw on specific studies and examples to illuminate some of the concerns.

Defining the Mentoring Concept as a Theoretical Basis for Research

Perhaps the most critical review of mentoring theory and research was carried out by Bozeman and Feeney (2007). They “nominate mentoring as an outstanding illustration of limited progress in theory for a topic that is obviously important and amenable to convenient measurement ... there has been too little attention to core concepts of theory” (p. 719). This problem was also noted by Janssen, Vuuren and Jong (2015) in their literature review of informal mentoring at work, and is echoed by multiple authors including Allen et al. (2004), Gershenfield (2014), and Janssen, Vuuren and Jong (2015).

The most troublesome issue related to theory building appears to be that many studies do not provide a definition of the concept. The consequence of this is that mentoring research can be confused with neighbouring theories such as training, coaching and socialisation. Let’s consider a number of different mentoring definitions:

- “Offline help from one person to another in making significant transitions in knowledge, work or thinking” (Megginson & Clutterbuck, 1995, p. 13).
- “Mentoring is a long-term relationship between a senior, more experienced individual (the mentor) and a more junior, less experienced individual (the protégé) (Eby & Allen, 2002, p. 456).
- “Mentoring is defined as a developmental relationship that involves organizational members of unequal status or, less frequently, peers” (Bozionelos, 2004, p. 5).
- “Mentoring has one clear purpose, the learning and development of an individual, a process that involves change, in this case social change” (Brockbank & McGill, 2006, p. 9).

Whilst we may not subscribe to any of the aforementioned definitions, we can probably agree that over the last twenty years, views on mentoring have changed to encompass a much broader perspective than the traditional US-centric protégé/mentor dyad. Clutterbuck (2003) notes that clarifying the mentoring concept in mentoring research is vital because failure to do so makes it difficult, if not impossible to replicate the study; make direct comparisons between studies; or draw meaningful conclusions about the mentoring relationship.

Identification of Mentoring Programme Aims, Objectives and Operational Components

In addition to clarifying the definition of mentoring, the research indicates that it is also essential to clarify the aim and specify objectives and operational components of the mentoring program. Logically, if one of the purposes of the evaluation of the mentoring programme is to understand the extent to which the objectives have been achieved, it is important to articulate the aims and objectives clearly at the outset of program development and implementation.

Program components are generally developed to meet programme goals and purposes. These components are varied across programmes (Long et al., 2012). Although these

components can have a serious impact on program success. Allen et al. (2008) identified a clear lack of explicit program operational components, such as participants' profile, training, duration and frequency of mentoring within program descriptions and within research studies. Examining this issue, Gershenfeld's (2014) review of twenty published studies on undergraduate mentoring programs in the US from 2008 to 2012 found a clear lack of identification of explicit program operational components, including for example, participant profile, role, training, duration and frequency of mentoring.

Not identifying components such as the aims and objectives of the program when conducting research on it makes it difficult to understand the extent to which the participants' outcomes relate to the overall purpose of the mentoring program (Clutterbuck, 2013). Additionally, the inclusion of such detail is important because failure to do so, results in the inability to compare studies on a like-for-like basis.

Brondyk and Searby (2013) deal with the importance of these elements in assuring best practices in mentoring. Although the article identifies the complexities of mentoring in higher education and primary and secondary school education, their recommendations have implications for mentoring in general. The authors suggest that best practice involves assuring that mentoring programs achieve their intended consequences. This of course necessitates having a clear delineation of the purposes of the program or relationship. The authors acknowledge the importance of understanding what is being done well and what needs to improve in mentoring specific to different contexts. The importance of context will be discussed next.

Understanding Context and the Connectedness between Multiple Factors

Arguably, there has been little attention in the literature and practice paid to the broader context of mentoring (Chandler et al., 2011; Jones & Corner, 2012); for example, there is a greater emphasis on functional approaches which examine instrumental

mentor/protégé motivations, with little focus on relational or affiliative mentee/mentor motivations (Ragins, 2012; Ragins & Verbos, 2007). A number of researchers have explored and recommended the need for further in-depth description and appreciation of context, acknowledging the degree to which multiple factors can influence and impact the study of mentoring (Allen, Poteet & Burroughs, 1997; Allen et al., 2008; Chandler, & Kochan, 2013; Janssen, Vuuren & Jong, 2015; Jones & Corner, 2012; Kram & Yip, 2011). These factors are important in understanding the influence and impact of developmental networks, organizational structure and culture. Kochan's (2013) paper presented a theoretical model of culture from which a conceptual framework was built which can be used to conduct a cultural analysis within the context of the development and implementation of mentoring programs.

Kochan (2013, pp. 422–424) provides a working scenario, in which a mentoring program can be developed, examined, implemented, and evaluated from a cultural perspective. This type of analysis is important as it acknowledges that the success or failure of mentoring programs is dependent upon a multitude of issues, including cultural aspects inherent within the individual, organization, program design and processes and society.

Chandler, Kram and Yip (2011) reviewed the mentoring literature from an ecological perspective. They recommend that researchers need to adopt different methodological approaches that facilitate our understanding of multiple levels of analysis. This includes the ontogenic system (individual) microsystem (developmental networks and organisational context) and societal macrosystem (societal influences such as technology and culture). Adopting this approach requires us to consider mentoring from a reciprocal, interdependent perspective, considering the connectedness between the individual and the environmental system. Research to-date focuses on the ontogenic individual-level and microsystem dyadic-level, examining specifics such as gender, race, informal vs. formal mentoring and

behaviours by individuals, but tends not to focus on the organizational or societal levels (Bicle, Witzki & Schneider, 2009).

Similarly, Janssen, Vuuren and Jong's (2015) literature review of informal mentoring at work suggests that the context of mentoring is important in understanding mentees developmental networks as a means of considering influences outside of the mentor-protégé relationship. This extends to individuals, groups and the organizational context, acknowledging the influence of the protégés ecosystem and the impact this may have on the mentoring processes between mentor and protégé (Chandler et al., 2011; Kram & Ragins, 2007).

Waterman and He's (2011) literature review of fourteen mentoring studies examining teacher retention between 2005 and 2010 makes a number of suggestions in regards to the design and evaluation of future mentoring programs. First, in recognising the complexity of mentoring relationships, attempts to establish linear connections between two phenomena such as mentoring and retention is challenging. Instead, they suggest a more contextual approach, which takes into account broader personal needs in interactional capacities is more useful in understanding value. This point is not that dissimilar from Janssen et al. (2015) who suggest that the degree to which positive outcomes related to mentoring are a direct result of mentoring activities is unclear and that there is a lack of studies addressing the multi aspects including, amongst others interactions and temporal influences. Second, the importance of holistic process evaluation, rather than program evaluation is important in establishing the degree to which other actors influence professional development and ultimately, retention. Finally, evaluating the same mentoring program from different paradigms would facilitate greater insight for those engaged in design, development and evaluation.

A final issue of importance related to context was explored through Waterman and He's (2011) literature review which found a dominance of quantitative approaches to

research. Of the fourteen studies the authors reviewed, five were quantitative, and of the seven that adopted a mixed method approach, quantitative data dominated, with qualitative data being very much secondary. This focus on quantitative data, although valuable, can also neglect the deep exploration of features within the mentoring process that help explain the significance of context (Kapadia, Coca & Easton, 2007).

However, one study, which provides interesting insights into context, exploring the experiences of female academics was conducted by Esnard et al. (2015). The authors chose to use narrative stories to facilitate the personal reflections of seven multicultural network members — including the authors — describing their experiences of collaboration and mentoring within the network. Mentoring networks are regarded as an important developmental aspect for women of colour, addressing both gender and race issues (Davis, Chaney, Edwards, Thompson-Rogers & Gines, 2012; Johnson-Bailey & Cervero, 2008; Ragins, Townsend & Mattis, 1998). The focus of the research was the examination of the processes and structures of the peer mentoring network and how this influences relationships and outcomes. There were clear benefits for the group participants. At the relational level, the central interest in multicultural issues became the glue that held the group together, creating and shared sense of identify and enabling voice. What was less clear was the extent to which interconnected networks, organizational and societal norms influenced the mentoring experiences of the network members.

De Four-Babb, Pegg and Beck's (2015) exploratory study analysed the stories of eight non-tenure-track academics belonging to an international peer mentoring group, described as a 'professional learning community' (p. 77). Careers of non-tenure-track academics are subject to increasing interest (Anderson, 2007; Basten, 2012; Goldman & Schmalz, 2012; Hoyt, 2012; Wolfinger, Mason & Goulden, 2009). The narrative stories of the academics were analysed to understand their experience as 'outsider' academics in relation to tenure

track, geographic transition and academic trajectory. Included within the analysis was the lived experience and narrative stories of the three authors. Informal peer mentoring groups are identified as having a supportive role in academic career development and can mitigate intellectual poverty experienced by ‘outsiders’. What is unclear in the article is the extent to which contextual factors such as organizational structure and culture influence the peer mentoring affiliations, enabling and/or constraining professional development. This would be helpful to understand the organisational microsystem and broader societal macrosystem (Chandler et al., 2011).

Exploring the connectedness between the ontogenic system, microsystem and macrosystem enhances our ability to understand the ecological perspective (Chandler, Kram & Yip, 2011). Examining mentoring and the relationship between multi-dimensional outcomes would also be helpful in determining construct validity and relevance (Janssen, Vuuren & Jong, 2015; Ragins, 2012; Ragins & Verbos, 2007). More research needs to be done in this area in order to garner a deeper understanding of the mentoring process within its contextual framework.

Proving Cause-and-Effect

Mentoring literature has been criticised for its instrumental and functional emphasis, which is often focused on findings and outcomes (Bozeman & Feeney, 2007), rather than to understanding the causal explanations involved in these relationships and programs. Janssen, Vuuren and Jong’s (2015) literature review of twenty-four past mentoring studies of informal mentoring at work argues that the degree to which studies are able to prove cause-and-effect relationships is questionable. These authors suggest that the relationship between positive outcomes and mentoring activities is unclear and there is little understanding of the underlying developmental mechanisms that cause mentoring outcomes. This is, in part, due

to the lack of studies addressing the multi-aspects including of mentoring including, amongst others processes, interactions, context and temporal influences.

Examples of the lack of attention to the connection between outcomes and processes are numerous. For example, Collins et al. (2014) explored the experiences of eight women academics – including the author's – belonging to a women's peer mentorship group. The particular focus was on career pathways into academia, a subject which has been widely researched from a variety of perspectives (Kamvounias, McGrath-Champ & Yip, 2008; McCormack & West, 2006; Walkington, Vanderheide & Hughes, 2008; Wasburn, 2007). Each group member wrote an autobiographical narrative account of their experience relating to "pathways to academia, experience of academia, and future career aspirations" (Collins et al., 2014, p. 98). All group members working in the sector secured a promotion to higher-level academic positions. Whilst the authors claim that the mentoring model turned out to be effective in reaching the participants career aspirations, cause and effect is not entirely transparent. For example, there was no indication as to what extent wider interconnected developmental relationships influenced this success.

Jones' (2012) longitudinal study investigated the learning outcomes of forty-eight mentees and mentors in formal mentoring dyads in a Healthcare Trust. Semi-structured interviews were conducted over a seventeen month period during the beginning, middle and end stages of their mentoring relationship. One of the most significant limitations noted was the difficulty in making a direct link between the impact of mentoring and the participants' wider network, including, amongst others managers, colleagues and tutors.

Similarly, Laukhuf and Malone's (2015) phenomenological study of twenty-two women entrepreneurs was not able to identify the extent to which immediate and wider networks facilitated mentee development. The authors used interviews to understand the participants' lived experience and perceived value of the mentoring intervention (Creswell,

2012; Marshall & Rossman, 2011). The study did show that the mentoring was of benefit to the women entrepreneurs. It was also noted that many women entrepreneurs rely on family and friends for guidance and support, but the degree to which the wider networks facilitated development was absent.

There appears to be little research that delves deeply into cause and effect in mentoring endeavours. Further focus on this issue would help us to better understand the connectedness between the individual and the environmental system, shifting from the ontogenic system and microsystem to understanding the influence and impact of the macrosystem (Chandler, Kram & Yip, 2011).

Developing Cross-Cultural Comparative Studies

US literature and western culture tends to dominate mentoring literature reviews (Allen et al., 2008). This western bias was also a feature of Terrion and Leonard's (2015) literature review of fifty-four student peer mentoring programmes in which the majority of these studies were in Canadian and US universities. The authors suggested that cross-cultural comparative studies would enhance our understanding of the characteristics of effective mentors in other cultures and contexts. Because of this, many mentoring studies assume that the aim of the relationship is development of leadership attributes but recent studies indicate that the concept of leadership is culturally dependant. For example, in African culture, respect, caring for others, sharing and cooperation may differ to that of western cultures (Kochan, 2013).

Closely related to this issue is the way in which issues connected to culture are defined. Reeves (2015) recent review of cross-cultural mentoring across one hundred twenty-three articles identified the need for construct clarification and use of consistent terminology related to cultural concepts. One of the most significant issues was the inconsistent use of terminology. This is illustrated by the similar use of *cross-cultural* and

inter-cultural mentoring. Cross-cultural mentoring is described as the ‘means to compare and contrast two cultural groups’, and intercultural ‘is what happens when the two or more culturally-different groups come together, interact, and communicate’ (p. 11). The terminology is used interchangeably in the articles reviewed, which can cause difficulty in developing a significant body of literature, providing direct comparison. More recently, the term pan-cultural has also been used to describe mentoring across cultures, acknowledging the societal differences which may influence the way in which mentoring may occur.

In the societal macrosystem, Chandler et al. (2011) identify the need to examine mentoring across cultures and in multi-cultural contexts, acknowledging the shift in extra-organizational platforms such as Facebook and LinkedIn which connect individuals, groups and organizations. Here, in-depth studies are needed to understand mentoring across cultures, particularly with advances in technology and the enhanced ability to facilitate global mentoring systems.

Multiple and Varied Research Methods

Broadly, mentoring studies can be group into three categories: literature reviews, concept papers and empirical research. Literature reviews consist of critical, integrative, literature and mapping analyses. Concept papers explore hypotheses, evaluate literature and philosophical underpinnings. Several literature reviews, focused on varied aspects of mentoring, have been published in a variety of peer reviewed journals over the last ten years. Journals include, the *Academy of Management Annals* (Chandler, Kram & Yip, 2011), *Administration and Society* (Bozeman & Feeney, 2007), *International Journal of Mentoring and Coaching* (Reeves, 2015); *International Journal of Management Reviews* (Jansse, Vuuren & Jong, 2015), *Journal of Vocational Behavior* (Allen et al., 2008; Kammeyer-Mueller & Judge, 2008; Underhill, 2006), *Mentoring and Tutoring: Partnership in Learning* (Huizing, 2012; Long, et al., 2012; Terrion & Leonard, 2007; Waterman & He, 2011),

Research in Higher Education (Crips & Cruz, 2009), *Review of Educational Research* (Gershenfield, 2014; Jacobi, 1991), and the *International Journal of Mentoring and Coaching in Education* (Brondyk & Searby, 2013; Dominguez & Hager, 2013).

In particular, Waterman and Ye HE's (2011) article highlighted mentoring research and evaluations carried out in the USA since 2005 regarding the effectiveness of mentoring programs for new teacher retention. Huizing's (2012) article presented a literature review of peer-reviewed articles and dissertations that contribute to the theory of research of group mentoring. Brondky and Searby's concept paper describes the complexity that underlies best practices in mentoring research. The purpose of their article is to begin to develop and identify research-based best practices in mentoring education. Kochan's (2013) article presented a theoretical model of culture from which a conceptual framework was built.

Empirical research consists of qualitative, quantitative, mixed method and case study reviews. Qualitative mentoring research adopts a range of approaches, techniques and data collection methods including, amongst others: participatory action research exploring peer group mentoring narrative stories (Collins, Lewis, Stracke & Vanderheide, 2014); longitudinal qualitative case study, semi-structured interviews with mentees and mentors (Jones, 2012); phenomenological study, investigating the lived experience of the participants through interviews (Laukhuf & Malone, 2015); narrative enquiry to make sense of the lived experience (De Four-Babb, Pegg & Beck, 2015); in-depth, semi-structured interviews and focus groups (Zambrana, Ray, Espino, Castro, Cohen & Eliason, 2015); structured interviews (Lakind, Atkins & Eddy, 2015); interpretative involving day long reviews with discussion and focus groups (Ivey, Geber & Nänni, 2013); and, reflective narratives (Esnard, et al., 2015; Jones & Brown, 2011).

Qualitative data in particular can enhance our understanding of the role of mentoring in different contexts and content domains. This is particularly important, as mentoring has

become a global, boundary-less phenomenon, facilitated by increasing use of technology to facilitate workplace mentoring.

Examining the literature, Bozeman and Feeney (2007) found that the vast majority of mentoring research is quantitative. In their research review, over 90% used survey-based methods and less than 20% triangulated multiple data sources. Quantitative mentoring research adopts a much more narrow range of approaches than qualitative research, techniques and data collection methods including, examples include: mentor triad questionnaire using a Mentor Self-Efficacy Scale (Ferro, DeWit, Wells, Speechley & Lipman, 2013); mentee questionnaire based on the mentor behavior scale (Brodeur, Larose, Tarabulsky, Feng & Forget-Dubois, 2015); protégé questionnaire, using t-test (Bouquillon, Sosik & Lee, 2007); mentee questionnaire (Baranick, Roling & Eby, 2010); protégé-mentor dyad questionnaire using polynomial regression analyses (Mitchell, Eby & Ragins, 2015); mentee questionnaire using correlations, cross tabulations and binary logistic regression (Roszkowski & Badmus, 2014).

Mixed method mentoring research adopts a range of approaches, techniques and data collection methods including, amongst others: questionnaires, focus groups and interviews (Flavian & Kass, 2015); questionnaires, semi-structured individual and focus-group interviews, contributions in workshops and observations (Ruru, Sanga, Walker & Ralph, 2013); questionnaire and semi-structured interview (Johns, McNamara & Moses, 2012); observation, archival documents, audio/video data and interviews (Sampowicz & Hudson, 2012).

Examples of mixed-method approaches demonstrate variation in the methodological approaches used. For example, Zambrana et al.'s (2015) research examined mentoring experiences of fifty-eight underrepresented minority faculty at twenty-two research-extensive institutions, utilising in-depth interviews and focus groups. Brodeur et al.'s (2015) research

involved the construction and validation of a tool to measure the supportive behaviors of mentors participating in school-based mentoring programs. Kammeyer-Mueller and Judge (2008) conducted a quantitative research synthesis, focusing on estimating multivariate analytical paths between mentoring and career outcomes. Johns, McNamara and Moses (2012) exploratory research triangulated quantitative and qualitative research to better understand the impact of a group-mentoring model in an Australian university.

Multiple methods and data sources provide the opportunity to collect different types of data and enable triangulation through the comparison of data sources and potentially increases the external validity of the research. Notwithstanding the aforementioned, Chandler et al. (2011) identified at least six recent studies that combine quantitative and qualitative methods, consider multiple sources of data and/or involve multiple data-collection points over time (Cotton et al., 2011; Gentry et al., 2008; Higgins et al., 2010; Shen, 2010; Singh et al., 2009a, 2009b).

At the ontogenic level, Chandler et al. (2011) suggest that researchers need to develop multi-method approaches that explore the inter-connectedness of influences such as education, individual competence, ethnicity, race and gender (Allen, Poteet & Burroughs, 1997; Cole, 2009). In examining the microsystem, it is suggested that a qualitative research approach can be best used to consider group characteristics, functions and processes, particularly in regard to the distinction to dyadic mentoring relationships, including a constellation of relationships beyond. This extends to the organisational microsystem, where structure and culture influence mentoring programs in varying degrees (Noe, Greenberger & Wang, 2002).

Overall, the need to adopt varied research methods, which support the ecological perspective, underlies the review of mentoring literature.

Enhancing Rigour

A number of studies have criticised mentoring research for its lack of rigor. These criticisms focused primarily upon the use of single data collection points, the lack of longitudinal studies and small sample sizes (Allen et al., 2008; Bozeman & Feeney, 2007; Gershenfeld, 2014). Bozeman and Feeney (2007) suggest that lack of longitudinal studies, single data point collection studies and limited sample sizes illustrate the extent to which advancement in the field of mentoring research is limited. Allen et al. (2008) found that mentoring research uses less longitudinal methodological designs than organizational and management research. This is significant because mentoring studies are often concerned with identifying beneficial outcomes, but a single point in time of analysis provides little evidence of development over time; the primary purpose of longitudinal design is to examine changes over time which is arguably more suitable in this regard.

As noted in the first section on defining mentoring, while definitions differ, all agree that mentoring is a developmental relationship. Thus, an expectation might be that the mentee experiences significant change and gain greater insight through enhancing the quality of their thinking. If this is the case, then the examination of change over time is important in order to determine longer-term development. A single data collection point is a deeply inadequate method to approach the evaluation of mentoring relationships, where a longitudinal method facilitates analysis over time.

Ferro et al. (2013) evaluated the measurement properties of a newly created *Mentor Self-efficacy Scale*. The purpose of the Scale is to better understand “mentors’ levels of confidence in their knowledge and ability to provide support and guidance for children in ... community relationships” (p. 147). In the first round of questionnaires, two hundred forty-nine triads participated. In the second round of questionnaires, one hundred fifty-one of the original two hundred forty-nine participated. There were several methodological limitations

recognised in the study. First, data were only collected from mentors in current relationships, not those that were terminated; this is a missed opportunity to understand what led to the termination and whether or not there was a causal link with knowledge and ability to provide support and guidance. Second, data were not collected from subsequent follow-up periods. Therefore the impact on mentor self-efficacy of their growing experience and longer-term relationships is unknown.

Mitchell, Eby and Ragins (2015) examined the antecedents and outcomes of perceived similarity in mentoring relationships. Their sample consisted of eighty-two protégé-mentor dyads from two large US universities, consisting of both informal and formal mentoring relationships. The most significant limitation within the context of this chapter is that the study was not longitudinal, further research would help to identify direction of causality between associations found. Allen et al. (2008) similarly found the lack of longitudinal methodological designs to be a concern, particularly as a significant number of studies measure a single point in time, providing minimal, if any evidence of development over time.

Johns, McNamara and Moses (2012) explored academics' perceptions, motivations and barriers for participation in the *Women's Group Mentoring Programme (WGMP)* in an Australian university. The *WGMP* is defined as a 'specific corporate product' (p. 74). Thirty-three participants completed a survey and eleven then participated in follow-up interviews. The results raised a number of concerns around program branding. This type of pragmatic approach is useful in supporting others embarking on the development of mentoring programmes. From a methodological perspective, the sample size was small and the research focused on one voluntary corporate programme, which raises issues around external validity.

There have been a number of literature reviews of mentoring in the educational context (Brondyk & Searby, 2013; Gershenfeld, 2014; Long et al., 2012; Terrion & Leonard, 2007; Waterman & He, 2011), specifically in the areas of peer mentoring, teacher attrition and retention and peer mentoring. Gershenfeld's (2014) review summarised twenty published studies on undergraduate mentoring programs in the US from 2008 to 2012. The review acknowledges and builds on two previous reviews conducted by Jacobi (1991) and Crisp and Cruz (2009). Gershenfeld (2014) acknowledges the methodological progress made since the previous two reviews, particularly in respect of the use of theory or conceptual frameworks, present in 70% of the mentoring studies reviewed. However, considerable progress is still needed if we are to improve internal and external validity of mentoring research. The literature review classified the twenty mentoring studies using the *Levels of Evidence-Based Intervention Effectiveness (LEBIE)*, developed by Jackson (2009). The *LEBIE* framework was developed to assess methodological rigor of social service interventions, and was used to establish the level of research, from Level 1, *Superior Intervention* to Level 5, *Concerning Intervention*. Over 70% of studies reviewed, were either Level 4 (*Emerging Intervention*) or Level 5, the lowest classification. The consequence of receiving the lowest score on the *Levels of Evidence-Based Intervention Effectiveness (LEBIE)* classification scale was that "there was no conclusive evidence that mentoring programs had impact on the desired outcomes" (p. 385). The drivers of the classification were two-fold; first, a single point of data collection and, second no comparison group, showing little evidence of positive change to participants as a result of mentoring.

There are a number of practical implications involved in increasing methodological rigour in mentoring resources including such things as financial costs and time. However, if we are to illustrate the impact and value of mentoring practice, longitudinal research should be given serious consideration.

The ‘So What’ Question

The final critical issue in mentoring research is dealing with the ‘so what’ question. The ‘so what’ question concerns the degree to which mentoring research contributes to the existing body of knowledge and practice, theoretical and empirical. This is particularly relevant for others researching in the field and for the organisation investing in mentoring programs (Clutterbuck, 2013).

There are different ways in which we can address the ‘so what’ question. Among these are:

- How does the study contribute to the existing body of knowledge?
- What are the implications in relation to mentoring as a concept?
- What are the implications of the findings for the future design, implementation and evaluation of mentoring programs?
- What are the implications for key stakeholders invested in mentoring programs: organizations, program teams, mentees and mentors?
- Does it enable program managers to design, implement and evaluate more effective programs?
- Does it assist participants in building strong, more effective mentoring relationships?
- What are the implications in respect of mentoring methods, techniques and processes?
- What are the implications from a methodological perspective?
- What are the implications for future research agendas?

Broadly, it is important to think about the contribution research makes to the continual development of theory and practice. It is not one or the other; it is connectedness between theory and practice that will address many of the criticisms discussed in this chapter.

The Way Ahead for Mentoring Research

In this chapter, I have provided an in-depth analysis of the quality of contemporary interdisciplinary scholarly literature in mentoring; exploring trends in the use of different research methodologies and identifying critical issues in mentoring studies.

Research can help to develop knowledge and understanding and the practice of mentoring, but only if the research is explicitly reported. This includes defining the mentoring concept and relationship; identifying the aim, objectives and operational components of the program; recognising the context and influencing factors; and, explicitly describing the methodology and study protocol. In addition to this, there is a need to continue to be more creative and take a longer-term view in our approaches to methodology including longitudinal research, mixed method research and exploring multiple levels of analysis. From a pragmatic perspective, mentoring practitioners and researchers need to address the 'so what question'. This will assist organizations, program developers, managers, evaluators, researchers and participants to understand the practical implications of the results.

There is a clear opportunity for greater collaboration between academics and practitioners in the design and analysis of research. An evaluation strategy is a necessary and important aspect of any mentoring program; this can be supported by a strong theoretical foundation which will ultimately improve the quality of research and practice.

References

- Allen, T. D., Eby, L. T., O'Brien, K. E., & Lentz, E. (2008). The state of mentoring research: A qualitative review of current research methods and future research implications. *Journal of Vocational Behavior*, 73(3), 343–57.
- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89(1), 127.
- Allen, T. D., Poteet, M. L., & Burroughs, S. M. (1997). The mentor's perspective: A qualitative inquiry and future research agenda. *Journal of Vocational Behavior*, 51(1), 70–89.
- Anderson, V. (2007). Contingent and marginalised? Academic development and part-time teachers. *International Journal for Academic Development*, 12(2), 111–121.
- Baranik, L. E., Roling, E. A., & Eby, L. T. (2010). Why does mentoring work? The role of perceived organizational support. *Journal of Vocational Behavior*, 76(3), 366–373.
- Basten, F. (2012). Through the looking glass: A narrative of non-change. *Educational Action Research*, 20(1), 95–111.
- Blickle, G., Witzki, A. H., & Schneider, P. B. (2009). Mentoring support and power: A three-year predictive field study on protégé networking and career success. *Journal of Vocational Behavior*, 74(2), 181–189.
- Bouquillon, E. A., Sosik, J. J., & Lee, D. (2005). 'It's only a phase': Examining trust, identification and mentoring functions received across the mentoring phases. *Mentoring & Tutoring: Partnership in Learning*, 13(2), 239–258.
- Bozionelos, N. (2004). Mentoring provided: Relation to mentor's career success, personality, and mentoring received. *Journal of Vocational Behavior*, 64(1), 24–46.

- Bozeman, B., & Feeney, M. K. (2007). Toward a useful theory of mentoring a conceptual analysis and critique. *Administration & Society*, 39(6), 719–739.
- Brockbank, A., & McGill, I. (2006). *Facilitating reflective learning through mentoring and coaching*. London: Kogan Page Publishers.
- Brodeur, P., Larose, S., Tarabulsy, G., Feng, B., & Forget-Dubois, N. (2015). Development and construct validation of the mentor behavior scale. *Mentoring & Tutoring: Partnership in Learning*, 23(1), 54–75.
- Brondyk, S., & Searby, L. (2013). Best practices in mentoring: Complexities and possibilities. *International Journal of Mentoring and Coaching in Education*, 2(3), 189–203.
- Chandler, D. E., Kram, K. E., & Yip, J. (2011). An ecological systems perspective on mentoring at work: A review and future prospects. *The Academy of Management Annals*, 5(1), 519–570.
- Chao, G. T. (1997). Mentoring phases and outcomes. *Journal of Vocational Behavior*, 51(1), 15–28.
- Clandinin, D. J. (2012). Literature review on induction and mentoring related to early career teacher attrition and retention. *Mentoring & Tutoring: Partnership in Learning*, 20(1), 7–26.
- Clutterbuck, D. (2003). The problem with research in mentoring. *International Journal of Mentoring and Coaching* (e-journal).
- Clutterbuck, D. (2004). *Everyone needs a mentor: Fostering talent in your organisation*. London: CIPD Publishing.
- Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist*, 64(3), 170.

- Collins, A., Lewis, I., Stracke, E., & Vanderheide, R. (2014). Talking career across disciplines: Peer group mentoring for women academics. *International Journal of Evidence Based Coaching and Mentoring*, 12(1), 92–108.
- Cotton, R. D., Shen, Y., & Livne-Tarandach, R. (2011). On becoming extraordinary: The content and structure of the developmental networks of major league baseball hall of famers. *Academy of Management Journal*, 54(1), 15–46.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Boston: Pearson Education.
- Crisp, G., & Cruz, I. (2009). Mentoring college students: A critical review of the literature between 1990 and 2007. *Research in Higher Education*, 50(6), 525–545.
- Davis, D. J., Chaney, C., Edwards, L., Thompson-Rogers, G. K., & Gines, K. T. (2012). Academe as extreme sport: Black women, faculty development, and networking. *Negro Educational Review*.
- De Four-Babb, J., Pegg, J., & Beck, M. (2015). Reducing intellectual poverty of outsiders within academic spaces through informal peer mentorship. *Mentoring & Tutoring: Partnership in Learning*, 23(1), 76–93.
- Eby, L. T., & Allen, T. D. (2002). Further investigation of protégés' negative mentoring experiences patterns and outcomes. *Group & Organization Management*, 27(4), 456–479.
- Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior*, 72(2), 254–267.
- Esnard, T., Cobb-Roberts, D., Agosto, V., Karanxha, Z., Beck, M., Wu, K., & Unterreiner, A. (2015). Productive tensions in a cross-cultural peer mentoring women's network: A

- social capital perspective. *Mentoring & Tutoring: Partnership in Learning*, 23(1), 19–36.
- Ferro, A., DeWit, D., Wells, S., Speechley, K. N., & Lipman, E. (2013). An evaluation of the measurement properties of the Mentor Self-Efficacy Scale among participants in Big Brothers Big Sisters of Canada community mentoring programs. *International Journal of Evidence Based Coaching & Mentoring*, 11(1), 146–160.
- Flavin, H., & Kass, E. (2015). Giving students a voice: Perceptions of the pedagogical advisory role in a teacher training program. *Mentoring & Tutoring: Partnership in Learning*, 23(1), 37–53.
- Gentry, W. A., Weber, T. J., & Sadri, G. (2008). Examining career-related mentoring and managerial performance across cultures: A multilevel analysis. *Journal of Vocational Behavior*, 72(2), 241–253.
- Gershenfeld, S. (2014). A review of undergraduate mentoring programs. *Review of Educational Research*, 84(3), 365–391.
- Ghosh, R. (2014). Antecedents of mentoring support: A meta-analysis of individual, relational, and structural or organizational factors. *Journal of Vocational Behavior*, 84(3), 367–384.
- Goldman, K. D., & Schmalz, K. J. (2012). Adjunct teaching part-time professorial possibilities, provisions, and provisos. *Health Promotion Practice*, 13(3), 301–307.
- Greenhalgh, T., & Wengraf, T. (2008). Collecting stories: Is it research? Is it good research? Preliminary guidance based on a Delphi study. *Medical Education*, 42(3), 242–247.
- Higgins, M., Dobrow, S. R., & Roloff, K. S. (2010). Optimism and the boundaryless career: The role of developmental relationships. *Journal of Organizational Behavior*, 31(5), 749–769.

- Hinchman, L. P., & Hinchman, S. K. (Eds.). (1997). *Memory, identity, community: The idea of narrative in the human sciences*. New York, NY: State University of New York.
- Hoyt, J. E. (2012). Predicting the satisfaction and loyalty of adjunct faculty. *The Journal of Continuing Higher Education*, 60(3), 132–142.
- Huizing, R. L. (2012). Mentoring together: A literature review of group mentoring. *Mentoring & Tutoring: Partnership in Learning*, 20(1), 27–55.
- Ivey, P., Geber, H., & Nänni, I. (2013). An innovative South African approach to mentoring novice professionals in Biodiversity Management. *International Journal of Evidence Based Coaching and Mentoring*, 11(1), 85–111.
- Jackson, K. F. (2009). Building cultural competence: A systematic evaluation of the effectiveness of culturally sensitive interventions with ethnic minority youth. *Children and Youth Services Review*, 31(11), 1192–1198.
- Jacobi, M. (1991). Mentoring and undergraduate academic success: A literature review. *Review of Educational Research*, 61(4), 505–532.
- Janssen, S., Vuuren, M., & Jong, M. D. (2015). Informal mentoring at work: A review and suggestions for future research. *International Journal of Management Reviews*.
- Johns, R., McNamara, J., & Moses, Z. (2012). Marketing and branding implications of a corporate service program: The case of women's group mentoring. *International Journal of Evidence Based Coaching and Mentoring*, 10(1), 74–88.
- Johnson-Bailey, J., & Cervero, R. M. (2002). Cross-cultural mentoring as a context for learning. *New Directions for Adult and Continuing Education*, 2002(96), 15–26.
- Jones, J. (2012). An analysis of learning outcomes within formal mentoring relationships. *International Journal of Evidence Based Coaching and Mentoring*, 10(1).

- Jones, R., & Brown, D. (2011). The mentoring relationship as a complex adaptive system: Finding a model for our experience. *Mentoring & Tutoring: Partnership in Learning*, 19(4), 401–418.
- Jones, R., & Corner, J. (2012). Seeing the forest and the trees: A complex adaptive systems lens for mentoring. *Human Relations*, 65(3), 391–411.
- Kammeyer-Mueller, J. D., & Judge, T. A. (2008). A quantitative review of mentoring research: Test of a model. *Journal of Vocational Behavior*, 72(3), 269–283.
- Kamvounias, P., McGrath-Champ, S., & Yip, J. (2008). ‘Gifts’ in mentoring: Mentees’ reflections on an academic development program. *International Journal for Academic Development*, 13(1), 17–25.
- Kapadia, K., Coca, V., & Easton, J. Q. (2007). Keeping new teachers: A first look at the influences of induction in the Chicago public schools. Chicago: Consortium on Chicago School Research, University of Chicago.
- Kochan, F. (2013). Analyzing the relationships between culture and mentoring. *Mentoring & Tutoring: Partnership in Learning*, 21(4), 412–430.
- Kram, K. E. (1985). *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott Foresman.
- Kram, K. E., & Ragins, B. R. (2007). The landscape of mentoring in the 21st century. In B.R. Ragins & K. E. Kram (Eds.), *The handbook of mentoring at work: Theory, research and practice* (pp. 659–692). Thousand Oaks, CA: Sage.
- Lakind, D., Atkins, M., & Eddy, J. M. (2015). Youth mentoring relationships in context: Mentor perceptions of youth, environment, and the mentor role. *Children and Youth Services Review*, 53, 52–60.
- Laukhuf, R. L., & Malone, T. A. (2015). Women entrepreneurs need mentors. *International Journal of Evidence Based Coaching & Mentoring*, 13(1), 70–86.

- Long, J. S., McKenzie-Robblee, S., Schaefer, L., Steeves, P., Wnuk, S., Pinnegar, E., & Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Thousand Oaks, CA: Sage.
- McCormack, C., & West, D. (2006). Facilitated group mentoring develops key career competencies for university women: a case study. *Mentoring & Tutoring, 14*(4), 409–431.
- Meggison, D., & Clutterbuck, D. (1995). *Mentoring in action: A practical guide for managers*. London: Kogan Page.
- Mitchell, M. E., Eby, L. T., & Ragins, B. R. (2015). My mentor, my self: Antecedents and outcomes of perceived similarity in mentoring relationships. *Journal of Vocational Behavior, 89*, 1–9.
- Noe, R. A., Greenberger, D. B., & Wang, S. (2002). Mentoring: What we know and where we might go. *Research in Personnel and Human Resources Management, 21*, 129–174.
- Ragins, B. R. (2011). Relational mentoring: A positive approach to mentoring at work. In K. S. Cameron, & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 519–536). New York, NY: Oxford University Press.
- Ragins, B. R., Townsend, B., & Mattis, M. (1998). Gender gap in the executive suite: CEOs and female executives report on breaking the glass ceiling. *The Academy of Management Executive, 12*(1), 28–42.
- Ragins, B. R., & Verbos, A. K. (2007). Positive relationships in action: Relational mentoring and mentoring schemas in the workplace. In J. E. Dutton, & B. R. Ragins (Eds.), *Positive relationships at work: Building a theoretical and research foundation* (pp. 91–116). Mahwah, NJ: Lawrence Erlbaum.

- Reeves, R. B. (2015). What is cross-cultural mentoring? An integrative literature review and discussion of the term cross-cultural mentoring. *International Journal of Mentoring and Coaching, XIII*(1), 2–20.
- Roszkowski, M. J., & Badmus, P. F. (2014). Mentee's interest in becoming a peer mentor as a function of perceived quality of the mentorship experience. *International Journal of Evidence Based Coaching and Mentoring, 12*(1), 123–137.
- Ruru, D., Sanga, K., Walker, K., & Ralph, E. (2013). Adapting mentorship across the professions: A Fijian view. *International Journal of Evidence Based Coaching and Mentoring, 11*(2), 70–92.
- Scandura, T. A., & Williams, E. A. (2000). Research methodology in management: Current practices, trends, and implications for future research. *Academy of Management Journal, 43*(6), 1248–1264.
- Sempowicz, T., & Hudson, P. (2012). Mentoring pre-service teachers' reflective practices towards producing teaching outcomes. *International Journal of Evidence Based Coaching and Mentoring, 10*(2), 52–64.
- Shen, Y. (2010). *Developmental networks of expatriates: The antecedents, structure, and outcomes*. Working Dissertation, Boston University, Boston, MA.
- Singh, R., Ragins, B. R., & Tharenou, P. (2009a). Who gets a mentor? A longitudinal assessment of the rising star hypothesis. *Journal of Vocational Behavior, 74*(1), 11–17.
- Singh, R., Ragins, B. R., & Tharenou, P. (2009b). What matters most? The relative role of mentoring and career capital in career success. *Journal of Vocational Behavior, 75*(1), 56–67.

- Terrion, J. L., & Leonard, D. (2007). A taxonomy of the characteristics of student peer mentors in higher education: Findings from a literature review. *Mentoring & Tutoring, 15*(2), 149–164.
- Underhill, C. M. (2006). The effectiveness of mentoring programs in corporate settings: A meta-analytical review of the literature. *Journal of Vocational Behavior, 68*(2), 292–307.
- Walkington, J., Vanderheide, R., & Hughes, R. (2008). Empowering university women through a group mentoring relationship. *The International Journal of Mentoring and Coaching [E], 4*(1), 83–93.
- Wasburn, M. H. (2007). Mentoring women faculty: An instrumental case study of strategic collaboration. *Mentoring & Tutoring, 15*(1), 57–72.
- Waterman, S., & He, Y. (2011). Effects of mentoring programs on new teacher retention: A literature review. *Mentoring & Tutoring: Partnership in Learning, 19*(2), 139–156.
- Wolfinger, N. H., Mason, M. A., & Goulden, M. (2009). Stay in the game: Gender, family formation and alternative trajectories in the academic life course. *Social Forces, 87*(3), 1591–1621.
- Zambrana, R. E., Ray, R., Espino, M. M., Castro, C., Cohen, B. D., & Eliason, J. (2015). “Don’t leave us behind”: The importance of mentoring for underrepresented minority faculty. *American Educational Research Journal, 52*(1), 40–72.